

CLAIMS

1. Portable object (1) of type smartcard, comprising:

- a microcontroller (30) comprising an efficient part (μ CE) to carry out data processing;
- a contact stud (VCC) to supply the said microcontroller (30) with current;
- a data input and/or output contact stud (I/O);
- confidential information;

characterised in that the portable object also includes:

- an interface circuit (GEN, CAP, COM) through which the efficient part (μ CE) receives a supply voltage (V_{μ} CE), the said interface circuit (GEN, CAP, COM) being designed to vary the supply voltage of the efficient data processing part (μ CE) in order to secure the said confidential data against current attacks.

15 2. Portable object of type smartcard according to claim 1
characterised in that the interface circuit includes:

- a switch (COM) between the said contact stud (VCC) and a supply terminal of the efficient data processing part (μ CE);
- a capacitor (CAP) connected between the said supply terminal of the efficient part of the microcontroller (μ CE) and another supply terminal of the efficient part (μ CE).

20 3. Portable object of type smartcard according to claim 2
characterised in that the interface circuit includes a pulse generator
(GEN) to control the switch (COM) in a desynchronised manner with
25 respect to the said data processing.

4. Portable object of type smartcard according to claim 2 or claim 3
characterised in that the capacitor has a capacitance greater than 1
nanofarad.

5. Portable object of type smartcard according to claim 1 characterised in that the microcontroller comprises a main layer (301) of silicon whose active face, which comprises a circuit and supports the contact studs (300), is sealed to an additional protective layer (302) 5 using a sealing layer (303).

6. Portable object of type smartcard according to claim 5 characterised in that the said interface circuit (COM, GEN, CAP) is located in the additional protective layer (302).

7. Microcontroller (30) intended to be incorporated in a portable 10 object (1) of type smartcard, comprising:

- a contact stud (VCC) to supply the said microcontroller (30) with current;
- a data input and/or output contact stud (I/O);
- an efficient part (μ CE) to carry out data processing;
- 15 - confidential information; characterised in that an interface circuit (COM, GEN, CAP) through which the efficient part (μ CE) receives a supply voltage (V_{μ} CE), the said interface circuit (COM, GEN, CAP) being designed to vary the supply voltage of the efficient data processing part (μ CE) in order to secure the 20 said confidential data against current attacks.